

REMARKS

The application has been reviewed in light of the Office Action dated February 23, 2004. Claims 1-13 and 15-40 are pending, with claims 1 and 13 being in independent form. Claim 14 was previously canceled, without prejudice. By this Amendment, claims 1 and 13 have been amended hereby to place the claims in better form for examination and to clarify the claimed invention, and claim 2 has been amended to convert the claim into independent form. Support for the amendments to claims 1 and 13 can be found in the application at, for example, page 14, lines 18-22.

Claims 1, 13, 15, 16, 25 and 37-40 were rejected under 35 U.S.C. §102(b) as purportedly anticipated by U.S. Patent No. 5,999,220 to Washino. Claims 17-23 and 27-29 were rejected under 35 U.S.C. § 103(a) as purportedly unpatentable over Washino in view of U.S. Patent No. 4,963,995 to Lang.

Applicant has carefully considered the Examiner's comments and the cited art, and respectfully submits that independent claims 1 and 13 are patentable over the cited art, for at least the following reasons.

This application relates to video editing systems. Source video material often needs to be prepared/edited for multiple standards (e.g., NTSC, PAL, etc.) which have different frame rates and different lines per frame. In many instances, the source material is in a format (such as film) other than the target format, and therefore must be converted to the target format in order to produce a master tape. It is often desirable to provide content in PAL as well as in NTSC format. However, once a program from film is converted to one of the NTSC or PAL formats, it is not easy to convert the program to the other format.

Therefore, the conversion followed by editing process must be repeated for each format (i.e. NTSC and PAL). However, the edits for one format cannot simply be repeated to achieve identical effects for the other format. It is laborious, difficult and expensive to produce separate NTSC and PAL format distribution copies of programming, using conventional techniques.

Applicant devised a video editing tools which avoid such problems. In particular, the tools enable source material to be stored native (i.e. at its original frame and line rates) in a store random frame access store, to be edited with other material stored native in its own format, which may be different, and the result to be output at any desired standard by resizing each frame to the desired standard as its output.

For example, independent claim 1 is directed to an editing system for moving images which comprises a frame-random access store, an input circuit, an editing processor and an output circuit. The frame-random access store stores image data representing a sequence of image frames which together form a moving image, the store storing data such that the frames can be accessed in a random order. The input circuit receives from a source data representing one or more sequences of image frames captured at a first frame rate and for transferring the data to a random access store. The data represents each frame in a sequence as a first multiplicity of image lines which together form the image frame. The first frame rate and first multiplicity of image lines define the input format. The editing processor edit data read from the store at a processed data rate to produce data representing an edited sequence of image frames. The output circuit outputs edited data representing an edited sequence of image frames at a second frame rate,

the data being output at an output data rate and representing each frame in the edited sequence as a second multiplicity of image lines which together form the image frame.

The cited art does not disclose or suggest the claimed invention.

Washino, as understood by Applicant, is directed to a multi-format audio/video production system with frame rate conversion. According to Washino, an input program is converted into a required format upon input into the system. In particular, Washino suggests compressing the input program for storage. Washino is concerned with processing the input program at low cost. The solution proposed by Washino is to convert the input program to formats that can be handled with less processing power.

In contrast, the claimed invention provides for storing the input program in the format in which it was captured (i.e. its input format), to preserve quality, and yet allowing it to be edited with data of other formats and output in another format as desired, in a single apparatus. For example, claim 1 describes that the data is stored in an input format defined by the first frame rate and first multiplicity of image lines.

Washino simply does not disclose or suggest these features.

Lang, as understood by Applicant, is directed to an audio/video transceiver apparatus including a capability for editing and/or copying from one video tape to another. Lang was cited for its disclosure of an editing apparatus comprising a VTR for receiving and storing the edited data.

However, Lang does not cure the above-identified deficiencies of Washino.

Applicant does not find disclosure or suggestion by the cited art

of an editing system (such as described in claim 1 or claim 13) wherein image data representing a moving image input in a first format, defining a first frame rate and a first multiplicity of image lines, at a corresponding rate is stored in a store in said first format and is manipulated to produce image data representing an edited moving image for output in a second format at a corresponding data rate, and processing is effected at a data rate which is variable and determines the second data rate defining a second frame rate and a second multiplicity of image lines, as provided by the claimed invention.

Since the cited art does not disclose or suggest each and every feature of the claimed invention, the cited art does not render the claimed invention unpatentable.

Accordingly, for at least the above-stated reasons, Applicant respectfully submits that independent claims 1 and 13, and the claims depending therefrom, are patentable over the cited art.

The Office Action indicates that claims 2-12 and 32-36 are objected to as being dependent upon a rejected base claim but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

By this Amendment, claim 2 has been amended by rewriting the claim in independent form including all of the limitations of base claim 1. Claims 3-12 and 32-36 depend from claim 2, either directly or indirectly.

Therefore, claims 2-12 and 32-36 also are believed to be allowable.

If a petition for an extension of time is required to make this response timely, this paper should be considered to be such a petition, and the Commissioner is authorized to charge the requisite fees to our

Deposit Account No. 03-3125.

The Office is hereby authorized to charge any additional fees that may be required in connection with this amendment and to credit any overpayment to our Deposit Account No. 03-3125.

If a telephone interview could advance the prosecution of this application, the Examiner is respectfully requested to call the undersigned attorney.

Allowance of this application is respectfully requested.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Paul Teng", is written over a horizontal line.

Paul Teng, Reg. No. 40,837
Attorney for Applicant
Cooper & Dunham LLP
Tel.: (212) 278-0400